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PROPOSED PLAN PUBLIC MEETING for the

STAR LAKE CANAL SUPERFUND SITE

Effie & Wilton Hebert Public Library

2025 Merriman Street

Port Neches, Jefferson County, Texas

JULY 11, 2013

6:04 p.m.

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P R O C E E D I N G S

MR. LITTLE: We're going to go ahead and try to get started. I want to thank everyone for coming this hearing, and I want to introduce some people and kind of give you an idea what we're going to do this evening. We're going to welcome you all. Thanks for coming.

Gary's going to show you a Power Point presentation on the things we've got planned for the site. Ken Shewmake is also from the Environmental Protection Agency and he'll be helping Gary. Gary's last name is Miller. He's actually the Remedial Project Manager for the site.

During the presentation, if you have a question that just can't wait, that would be fine; but we prefer that you wait till the end so we can get through it. We can go back to any slides that you want to go back and revisit and talk about the pictures of the maps that are over there. So we can go back but if you could wait till the end, then let us get through the presentation, that would help.

We have lots of people from lots of different organizations here tonight. We have a representative from Texas Commission on Environmental Quality. We have the Texas State Health Department representatives here, people from the EPA, gentlemen from Huntsman, couple of gentlemen

from Huntsman and the contractors for the site. So we should have people here that can answer any of your questions. Ken is the Risk Assessor and we will also be recording this meeting this evening.

Trevor Causey is our court reporter. She'll be taking everything down and recording it. This record will be part of the administrative record for the site. It will be kept in the repository here at the library. So that -- if any of you want to refer back to this meeting, it's something we said or didn't say, it'll be in there.

I'll ask you if you're going to ask questions during or after to please stand, state your name so that Trevor can catch who you are and if you could spell your name. They're not easy like mine, Little, you know. Some of our names get a little long and confusing.

Actually, the mailing of our fact sheet which I think everyone got started the 30-day comment period on the proposed plan. The comment period is open to public comment. Anything you want to state needs to be in writing and it needs to be addressed to Gary. In our fact sheet -- and there's copies back at the table where you signed in -- is the address that the comments need to be sent to. The comment period started June 21st, the day that the fact sheet should have been delivered here and it ends on July 20th.

Are there any questions at this point or can I turn it over to Gary and we can get started with the important things? Okay. It's all yours buddy.

MR. MILLER: Thank you, Bill. I'll just say I'm Gary Miller again. I'm with EPA. I'm the Remedial Project Manager for the site. Just a little bit of information about me. I've been with EPA for nearly 20 years now and --

So anyway, I just want to kind of add a few things that Bill said. We're going to be covering a lot of stuff here. Some of it's technical and some of it's -- it's really a summary of a lot more information. So all those documents that this information came from, they're all here in a repository in the library. So if any of you do want to take advantage of that, you're welcome to come by and look at it. And you can see these maps and these figures, they're all in there.

And also, please feel free to call me, send me an email. You can certainty ask questions tonight; but if you think of some questions later on or you're just curious about something, just give me a call. I'll be glad to talk to you so ...

Okay. We're going to talk about the Star Lake Canal Superfund Site tonight. Here's the location right on Neches River above Sabine Lake. There's Beaumont

up in the upper left corner. And going on to the next slide. This is more of a detailed map of the site. There's seven areas that were investigated in the site. We'll get into those areas more in a little bit.

Just a little bit of background. The main part is the -- let's see if this pointer works. Yeah. Here's the Star Lake Canal and it runs through here. And that's roughly 3 miles long. And a few other things. There's the Neches River right here and Sabine Lake is down over here in this area somewhere so ...

All right. So what's the history of the site? Well, it started off in the 1940's. They were, during World War II, they were making chemicals to make synthetic rubber during the war. So that's how it got started. During all that time, there were discharges in the Star Lake Canal, Jefferson Canal. And back in those early days, there were no permits, no restrictions. Just, you know, it was all just dumped into the canals.

Another back in 1983, Jefferson Canal was dredged and a dredge material was put up on the bank next to the canal. So we'll be talking about that somewhere later because that material was contaminated as well. The site was added to the Superfund List in 2000. That's officially known as the National Priorities List.

And then following that, there was an

administrator order that was issued to Chevron Environmental Management and Huntsman in 2005. And that order required that investigation and an assessment of the site and a study of various remediation alternatives for the contamination that was found.

One other thing I want to say, that all the investigation and the site cleanup will be done and paid for by Chevron Environmental and Huntsman so it's not the federal government during this work. It's -- they are. No. They aren't doing it under federal oversight and oversight of the state and other agents so anyway ...

Okay. Well, here's an aerial view of the site. And the main thing I wanted to show here is you can't really see the numbers; but that shows the locations of all the samples, part of them that were done. There were a total of about 250 sediment river mud samples, about a hundred soil samples, about a hundred tissue samples and that tissues are fish, crabs, insects, the plants, just all kinds of things were sampled.

So anyway, the Tier 1 or Phase 1 of the samples were done. That information was got back. Folks looked at it and they came up with a second round of samples and that's what these locations are. It's just to fill in some gaps of the information or get some more data about certain areas that -- so anyway, that was a Tier 2

samples.

All right. So what did we find? Well, there are a bunch of contaminants found. PCBs, the number of pesticides, a volatile organic chemicals, a number of metals, lead, arsenic. So anyway, all of these were -- these are all the contaminants that were in the site and found there.

All right. So well, what does that mean? What's the risks for all that stuff? Well, there are two types of risk assessments that's done: One is human health and one is for ecological risk. So this first one is the Human Health Risk Assessment. And well, basically the bottom line, there is no human health risk. There is eco risks. We'll talk about that in a little bit; but just looking at some of the numbers, there's two types of ways we estimate or calculate human health risks: One's cancer and the other one is noncancer.

So in the case of cancer, the highest risk that was calculated was 7 times 10 and minus 5th. Well, that's -- what that means is there's less than one additional cancer for every 10,000 people. So I know that's a lot of numbers but that is within the acceptable range for additional cancer risks.

Now, there's other -- there's noncancer risks, toxicities of various types. And the way we assess

that, we calculate this number that's called a hazard quotient. And we say the benchmark for that is one. So if it's greater than one, then there's -- it's likely noncancer effects would happen. Well, in all the areas, the highest risk was .96; and of course, the rest of them were lower than that. So the net result of that is the noncancer effects are unlikely to occur, all right.

So we're okay for the Human Health Risk Assessment, but then the second one was the Ecological Risk Assessment. And this is where we estimate the risk for the insects, the small animals, the birds, raccoons, bull fogs. I think there was a total of about 15 animals that were used as potential receptors. They were evaluated for this risk. So bottom line, there are ecological risks at the site and just a little more information about how we calculate that.

There's different methods for salt water and fresh water sediments. Now, the salt water areas are the Star Lake Canal area up until approximately the -- I understand it's called the Sara Jane Bridge and Molasses Bayou area. Those are all salt-water-type environments. And then up-street of that, it gets more into the fresh area areas.

But anyway, for the salt water areas, there's a benchmark we use. It's called the Effects Range Median

Quotient. And what we say, if that number is above 0.5, then there's a concern. There's a high probability that there's ecological risk. Well, some of the results, the highest result, we got up to almost 35. That was in the Molasses Bayou. So that's way above that benchmark. So there's a good probability of toxicity risks.

We kind of use the same process, a different benchmark for fresh water. For fresh water, we use a Probable Effects Level Quotient or a PEL. And if that number is above 1.5, then we say, okay, there's a problem there. Well, the highest results were about 55 and that was in the Jefferson Canal area. So as I said, there are ecological risks to the site.

All right. So, you know, that's a bunch of numbers; but what does that really mean? Here's a map that shows the results of all those quotients, those PELs and ERMs that were calculated. And what this map says is that if an area is this yellow or red, it has greater than 50 percent probability of eco-toxicity.

So looking at this map area, you see a lot yellow areas, a lot of red areas. There's some red areas here on Jefferson Canal. It's hard to see on this map; but also right here. It's some others right here. Those are the areas that were identified that need to be cleaned up or need to be remediated. So that's how -- you'll see

later on. I'll focus in on the individual areas. Well, this overall map and these results were how we came up with those areas so ...

All right. So what will be the objectives for this cleanup? As we said, there's ecological risks. So it's says protect the benthic invertebrates. Well, that's just insects and small animals in the mud. And we say we want to remediate areas that basically have a greater than 50 percent probability of having ecological toxicity.

We also want to protect the -- what we call the upper trophic level animals which are just animals higher in the food chain. And again, by -- we're going to do that by reducing or remediating somehow those areas that have the high toxicity and also by removing the contaminants from the Jefferson Canal Spoil Pile and I'll show you what that is here in a minute.

Okay. So how we're going to do that? Well, there's a number of ways that were evaluated based on the areas and what -- one is just dig it up and haul it off, depose of it off site. The second journal category is containment and there's a lot of different options for that. There could be soil caps, clay caps, erosion control mats. And what a mat is, that's just like an aggregate material, maybe aggregate clay or something that

has a like a polymer or polymesh material around it to contain it.

It could have some other things in it, too. Also, some armored cap if there's a concern about erosion in the area. You'll need the protection of an armored cap which here for the site basically means things like gravel and stuff.

The last one is Monitored Natural Recovery. What that means is you're just -- you don't do anything active to it. You depend on the natural processes. It may be biological chemical breakdown, physical burial, transport dilution. Yeah, dilution's included in it. But anyway, what was done is various combinations of all these alternatives were looked at for these various -- those seven areas at the site. And like I said, I'll be getting into that as to what those were for those each individual areas.

All right. Before I get into that, I should say well, how do we evaluate those various alternatives? Well, basically, there's these threshold criterias. What that means is some type of a remediation technology, it has to protect human health and the environment, all right, and it's to comply with the laws and regulations. So whatever we do, it's got to meet these two.

Now, the rest of them, these are -- we call

balancing and modifying criteria. There's a number of them here, but there are things like: Well, what's a long term effectiveness of this remedy or what's it cost? Another thing we consider is state and community acceptance. So that's part of what we're doing here is to let you folks know what we're talking about and hear your comments and hear what you think about it. So anyway ...

Okay. This is the first area, former Star Lake area. Here's Atlantic Road or Sara Jane Road. Star Lake Canal is running through here. Here is the hurricane levy and there's the pump station. Neches River is up over here in this area. Okay. This is the area --

Oh, one other thing, all these fancy colored lines you see running through here, these are all pipelines. So most of the areas have a lot pipelines running through them of all different types. So that's something that's going have to be dealt with in the remediation. But this area over here, these blue areas, these are the areas that have the high probability of toxicity. So that's the areas that would have to be remediated, have to be cleaned up somehow or another.

Okay. Here's a picture. This is standing on the Atlantic Road looking to the south. This is the Star Lake Canal. This whole area on both sides is the former Star Lake area. And the area that was blue on the former

map, it's on the left hand side. So this is the area that would require some work done to it.

All right. So what were the alternatives for this area? Well, five alternatives were considered, and that included -- now, one thing, EPA is required to always consider a no-action alternative like well, what would happen if he didn't do anything? Well, in this case, if he didn't do any --

In all these cases, if you didn't do anything, you'd leave a high risk and you know, we can't do that. But they pretty much all of them include some type of removal, dig it up and haul it off or some type of containment. And these are all put together in five different alternatives. And these were all evaluated in a report that's called the Feasibility Study and that Feasibility Study is here in the repository. So if any of you folks would like to get some more information, I'd encourage you to go take a look at it.

But after looking at and weighing those five alternatives and applying those -- you know, it's got to be protective, it's got to be in the laws, et cetera. We've come up -- this is EPA in conjunction with the other agencies, et cetera -- has come up with the preferred alternative for this area and that happens to be No. 2b.

Well, what is 2b? Well, this is what we're

proposing to do for this area, and it includes 12 inches -- removes the top 12 inches, hauling off site and dispose of it. Now, it's just outside of the pipeline areas. And the pipeline areas, you're concerned or you've got these pipelines with chemicals, high pressure, whatever so you don't want to be disturbing them. You need to be real careful close to the pipeline. So this removal would be just done out of the pipeline area. It's called pipeline servitude. It's typically 25 feet on either side of the pipeline.

After that's done, go back in with an impermeable cap. Well, it just means clay. So fill it back up to the original elevation. And then in the pipeline areas, either cover it with the erosion control mat which is -- that's the aggregate that has the polymesh to kind of support it. Just lay that on top near the canal banks or a 12-inch composite cap. Now, a composite cap would be 6 inches of soil and 6 inches of clay.

And I should say something about -- the clay has the advantage as it isolates the material blow better. And so in some cases, you'll see well, we're proposing to use clay. The soil does better for reestablishing the vegetation, the ecology and whatnot. So you'll see in number of areas we say well, let's go with the composite cap. Well, that's kind of the reason

for that. In other areas, we'll say an impermeable cap or clay because we want the extra isolation that that'll give you. Plus, the clay is a little bit more resistance to erosion and that kind of thing.

So anyway, that's the first area. The next area is the Jefferson Canal Spoil Pile. In this area, here is erosion levy. There's the pump house. This is 366 and so this area runs in between there. Jefferson Canal runs pretty much on this tree line through here and it goes under the road and it goes back over here. But anyway, this was material that was pulled out of Jefferson Canal when the dredging was done in '83 and yes, it's contaminated so --

And there's various mounds through this area and it's contaminated so -- and that's what the blue area is. And of course, you've got the pipelines going through here. Here's a picture of it. This is on top of the hurricane levy. The pump station is right over here to the left. Jefferson Canal is right in this tree line here. And so this open area right here is the spoil pile. That's where the material is placed when it was dredged.

All right. Here's something I just wanted to kind of point out again, the pipeline locations. In this particular area, here's the pipeline servitudes or areas

and that amounts to -- I think the number was 24 percent of the total area. So again, we need to be really careful in this area because we don't want to be breaching or breaking open one of those pipelines.

So anyway, okay. So what is a preferred alternative for the -- well, in this case, we looked at six different alternatives, combinations of removal and containment. The preferred alternative, again, happen to be No. 2b in the Feasibility Study. And that one included remove those mounds to the original grade and then go back over the entire area with a two-foot composite cap in this case which would be one foot of soil and one foot of clay.

Now, the plan is right now is to go over the pipeline areas with that as well. Well, of course, we need to be very careful doing that. So the plan would be to use light equipment, not the heavier equipment and do it carefully so we don't do any damage to those pipelines but anyway ...

Okay. The next area is the Jefferson Canal area. This is the upstream part of it. Here is 366. Jefferson Canal runs long here. Then along 366 crosses under it and then goes on up to the hurricane levy and that'll be in the next slide. But anyway, here's the pipelines again of the various types, all these color

lines. And the areas that need to be remediated are these blue areas. These were the areas that the sampling found high levels.

And so like this area here, here's another area next to the highway, goes under the highway. This is just a blowup of this section right here. The other thing is this area right here -- until you get close to the hurricane levy -- is okay. It's not contaminated. Either, you know, the material was washed on downstream or whatever; but anyway, the levels in the mud there, the sediment were all low. So there wasn't a risk in those areas.

All right. This is a downstream area. If on that previous slide, if you continue, here's the Jefferson Canal going. It turns around. This is a wooded area. This is a Spoil Pile over here. Here's the hurricane levy again. You can see the pump station really good here. Just as a --

For your information, what happens is this water goes under the levy. It's called an underflow, and that handles a normal flow. In times of high flow, there's a weir right here so the level rises. It goes over the weir, goes in the pump station. So that pump station supplements what's going in the underflow. So that's how the water gets over the hurricane levy. But

anyway, here's your blue areas. These samples had high levels. So this area right in here would need to be -- need to be addressed, need to be cleaned up.

Okay. Here's a picture. You can't really see the canal. It's kind of just right on the edge of this tree line here which again, standing on the hurricane levy right here. Here is the weir that goes to the pump station which is just off to the left. And what happens is the water flows over it, it rises, it goes over this weir and then it's pumped through the pump station.

All right. So what's the alternative for this area? The preferred alternative is No. 3b for this one. There were nine total alternatives evaluated for this one. So what come out -- came out of that is to do within -- this is all within the canal -- is dig up the top 12 inches but this is outside of the pipeline areas. So also --

Then go back and replace that with a soil cap again just outside of the pipeline areas. And for those contaminated areas where the pipeline crosses the canal, to go in there with an erosion control mat, again, just to stay on top of it. And that'd be, I guess you'd say minimally evasive in the pipeline areas.

All right. Okay. The next one is a Star Lake Canal area. Again, here's all the pipelines going

through it. Star Lake Canal, it's kind of hard to see but it runs up this way. The Neches River is up here. Here's the Atlantic Road crossing here. So basically, this area on either side of Atlantic Road is contaminated so it does require remediation.

Here's a picture of it that's looking toward the Neches River. So the preferred alternative for this one which is No. 2 is to dig up and remove the top 12 inches of the contamination and go back in there with a 12-inch clay cap. And you know, the purpose for the clay here as oppose to the soil is, again, it gives you a little more erosion protection in that area. Plus, it separates the remaining contamination that's -- will be -- remain after the top 12 inches is removed.

One thing I should say, in these areas where you have these canals and you have these flows, the hydraulic capacity of these channels, the work will be done so that capacity will be maintained, you know. We're not going to be filling up the canals and plugging them off so they back up, things like that. We'll maintain that hydraulic flow capacity.

All right. This next one is the Molasses Bayou area. Star Lake Canal runs through here. Again, there's some pipelines here but not directly in the Molasses Bayou area. Blue areas are the contaminated

areas right here.

Now, this is the same area but it's in the wetlands which is just outside of the area of the bayou. These blue areas are contaminated as you can see here, what would require remediation. Here's a picture of it. This area right here happens to be in that initial area you saw right here that has this contamination. So right in here, the bayou right here will have to be remediated plus both sides of the bank.

All right. So what are we talking about doing there? When the bayou, we're talking about Monitored Natural Recovery. And again, that's depending on natural processes. That's in the some of the areas that are -- I'll say they're still -- have some toxicity but they're less contaminated.

The problem in the wetlands or the issue in the wetlands is yeah, you can go in there and dig it up and haul it off; but when you do, you destroy the wetlands. You destroy all that habitat. So it's kind of a balancing issue between well, we want to clean it up but we don't want to destroy it when we try to clean it up.

So anyway, part of it is Monitored Natural Recovery; but in other areas that typically have the higher risk, we're going to dig up the top foot. And in the case of the bayou, you go back in there with a 12 inch

armor cap. So that's like gravel to stand up to the erosion that could be happening there.

In the wetlands area, the preferred alternative was 2b. And again, in the less contaminated areas that are -- still have toxicity, Monitored Natural Recovery. And then in the other areas are a little bit higher, a little bit more of a concern, a 12-inch composite cap.

Now, I will say about that composite cap, there is a concern because you're in the wetlands. You're piling on a foot higher. You're increasing elevation by a foot, okay. You're going to have the tides coming in. You're going to have erosion, whatever. So there is a little bit of implementability concern about that, you know, whether that material is going to stay there or whether it's going to tend to wash out. But I just wanted to mention that but that's what we're going with at this point.

All right. Now, this is the last area, Gulf States Utility Canal. This is about a hundred feet to the north, I guess, northwest of the Star Lake Canal. Here's the Star Lake Canal. Here's the Gulf States Utility Canal. And it's a very narrow and shallow area. It was dug when they were putting in all those utility lines. So you know, it's not really very big but it is there. And

this area is pretty much right near the middle of it and that's the contaminated area and it needs to be cleaned up.

Here's a picture of it. Neches River is on the background. Here's the big power lines and here, you can see part of it. You know, you can see water. Some areas, you can't hardly see water. It's all basically overgrown. It kind of comes and goes. But the preferred alternative for this area, the Gulf States Utility Canal, is No. 2 in the Feasibility Study which is a 12-inch composite cap, half soil and half clay for that blue area.

Okay. So, you know, that's all the alternatives we're recommending or preferring. So what is that going to cost? Well, it's not going to be cheap. These are the seven areas and the cost for the individual -- those each individual areas.

For instance, the former Star Lake area. That was the one that was just to the south of the Atlantic Road. That was going to be over five million dollars to do that. The total for all of them together is going to be just a little over 22 million. So fairly significant but I will say there was a range of alternatives looked at and some of the alternatives were less than that and some were a lot more than that. And so

if anybody's interested in that, we can get into the cost of some of the other alternatives.

Okay. I haven't said anything about groundwater yet, but I should mention that there is a groundwater plume of contamination under the Huntsman facility; but that groundwater contamination is not a part of this. It's being addressed under a Texas Corrective Action Program. They put in a number of monitoring wells and they're developing plans to address that. And currently, the thinking is a biodegradation, a natural biodegradation process but -- so that contamination is there but it's not a part of the Superfund Site. It's being handled under another program.

Okay. So what's going to happen? Bill mentioned we're in the middle of public comment period. That's going to end July 20th. We hope to get comments from you folks. We'll evaluate them. When we make the final selection of the remedy, that'll be in the Record of Decision which we call a ROD. And the ROD will include what we call a Responsiveness Summary and that'll include all the comments we get from the folks and our response to that comment.

So we hope to get the ROD signed and issued in September of this year so that'll be coming up fairly soon. Okay. So that's it. Appreciate your time. Feel

free to ask me any questions you want and I encourage you go to the repository if you would like to look at the -- get some more information about the site. So with that, anybody got any questions?

MR. BOURG: How long is all of this supposed to take?

MR. MILLER: It depends on the alternative but like -- well, before the construction is done, there's going to need to be a design phase. And a lot of these samples you saw, they would be -- I call it limited sampling to see what's there. But if you're going to actually go in there and dig it up, you're going to need to do a lot more sample to see exactly how far you need to dig up and how deep and that kind of thing.

So the remedial design phase, we don't have a schedule yet, but that may take a year, you know. We're talking a lot of samples, a lot of engineering technical designs back and forth. And then after that's done, then the work starts. And I don't have a good feel for you right now, how long that can take but --

MR. BOURG: We're talking more than a year, maybe five years probably?

MR. MILLER: Probably not five years. Just the design will be a year, maybe a couple of years for the construction, maybe a year, somewhere in that time frame

for -- to do the actual work. To dig up, you know, they're going to have to get in the marsh, dig it up, bring in the new material, put it down. They're going to have to --

Well, for instance, one thing they're going to have to do is look at all those pipelines a lot closer, make sure how deep they are, where their exact -- you know. These are all maps and maybe that's where the pipelines are or maybe not, you know. So they're going to have to look at those pipelines very closely so they know exactly where they are.

MR. ALLISON: Most of them, they should be four feet deep. It's required.

MR. MILLER: Yeah.

MR. LITTLE: Excuse me for a minute. Remember, we're recording this. She needs your name when you ask a question and the spelling; otherwise, we don't know who asked the question and it needs to be in the record, okay. Thanks.

MR. BOURG: My name is Carl Bourg, B-O-U-R-G, and I live on Pinetop.

THE REPORTER: I'm sorry?

MR. BOURG: I live on Pinetop.

THE REPORTER: And what's your name, sir, who just spoke, whoever just spoke or asked a question?

MR. ALLISON: Oh, Jerry Allison, J-A -- J-E-R-R-Y, A-L-L-I-S-O-N. And I live on Sara Jane Road next to Molasses Bayou. My property goes back about -- I don't know -- 1900 feet back in here, something like that.

THE REPORTER: Thank you.

MR. ALLISON: And I guess it's part of the -- I was going to get you to look at some maps with me later.

MR. MILLER: Yeah, yeah. It could very well be part of that.

MR. BOURG: Okay. Carl Bourg. The trees and all of that that are there now, a lot of that will be bulldozed over, I imagine, or pulled out.

MR. MILLER: Yeah. In all of those areas, we're going take the top 12 inches or whatever it is, yeah. That includes the vegetation, trees as well.

MR. BOURG: So when you get through, are you going to plant trees back or is it just going to be grass that somebody'll cut or what?

MR. MILLER: You know, that's a good question. I know that the thinking was that things would reestablish themselves, but that will really may need to be -- especially out in the Molasses Bayou area because we're saying we're going to add a foot but is that really going to stay there. There may very well need to be a

need to plant some stuff to bring it in there but that'll all be evaluated during the remedial design.

MR. BOURG: Okay. Then as you start hauling this material out, it's going to be contaminated. So you're going to put it in some type of a dumpster. I don't know if it's got water in it, is this going to leak out on the road as you drive down the road.

And are you going to tear up the road and are you going to fix the road and are you going to bring in fresh material? Well, that's going to tear up the road.

MR. MILLER: Right.

MR. BOURG: Which roads are you going to use? How are you going to have access to this site, you know? Where's all the traffic going to be?

MR. MILLER: Yeah. Those are all very good questions. The short answer is I can't tell you now, but that'll be decided during the remedial design. But if there are already damages to the road, that'll have to be repaired. As far as the leaking containers, you know, they're required -- you can't drive down the road with a leaking container.

You'll have to use sealed roll-offs. You can't have the material blowing out of the back of a -- That's where, you know, I said it's got to comply with all the laws and regulations. Well, there's laws and

regulations that say you don't do that.

MR. BOURG: Right.

MR. MILLER: You have to have it contained or you have to have it stabilized or you know, a lot of liquid waste need to mixed with things to absorbed the water. And I'm not saying what these are but that will all be looked at during the design so ...

MR. BOURG: And as -- say it's dry right now. Well, if you start driving heavy equipment in there and things dry up, now you have a lot of dust, contaminated dust may be blowing. So you know, it's something else.

MR. MILLER: Yeah. Dust control comes up with every site. And you know, here, a lot of the areas are wet. Well, that may help you with dust, but well, that's going to be a problem when you try to get heavy equipment in a marsh. Well, you can't do that.

MR. BOURG: Yeah.

MR. MILLER: So in the Molasses Bayou, there may be some, you know, we've talked about doing barges and things like that but -- so yeah. But that, you know, dust control as needed will be included so ...

MR. BOURG: And this isn't -- if a hurricane comes and you're -- a lot this of work of this work is being dumped under the storm levy -- of course, we're

outside the levy where we are. We live on Pinetop so it probably wouldn't effect us; but some of the other folks, would it effect them on the other -- they're protected by the levy or you're not going to damage the hurricane protection levy?

MR. MILLER: No, no, we won't damage that.

MR. BOURG: Okay.

MR. MILLER: Now, in the areas that were -- you know, it showed that the blue area was coming up. Well, in the map there, it kind of showed to it the middle of the levy. Well, no, no. We're not going to get in and damage the levy.

And remember, this risk was ecological risk, you know. We're not talking -- there's not a human health risk. So we're just talking about improving the environment, protecting all these animals. So no, we're not to go in there and destroy the levy, you know. We just go up in the Jefferson Canal, for instance, up to the levy. And you know, that'd be it so ...

Oh, one thing I did want to mention. Some of you folks probably are aware there's a Jefferson County Drainage District No. 7. A few days ago, they submitted a recommendation regarding Jefferson Canal. Now, our plan was to take out the top 12 inches and then go back in with 12 inches of new material.

They were concerned about dredging operations and maybe going through that one inch. You know, you can't control dredging that well. So they recommended that we go in there a concrete line channel in there. So actually, we'll be talking about that after the meeting tonight. But I want to let you folks know, I mean, that was a comment that we received to suggested an alternative remedy for at least the Jeff -- part of the Jefferson Canal area so ...

MR. BOURG: And Carl Bourg again. You mentioned something about the groundwater. We have a shallow well where we are and I know that's not what you're dealing with, but I wonder how we can find out about groundwater contamination.

MR. MILLER: There are -- part of it is actually in the Feasibility Study. There's a section on there that talks about it, but that's just like an overview of what the Texas has got done.

And Terry, I don't know want put you on the spot 'cause you're not involved with the site; but do you know anything about who the contact would be for that Corrective Action Program?

MR. ANDREWS: I don't. My name is Terry Andrews. I'm with the TCEQ. My office is in Houston. I'm kind of just standing in tonight. The Project

Manager, Phillip Winsor, isn't able to be here today.

I'm not sure who the project manager is at that Corrective Action Site.

MR. MILLER: If you would maybe after meeting, give me your contact information. I can find out and let you know.

MR. BOURG: Okay. Appreciate it.

MR. DUPLANT: Gary, I can let you know. The gentleman that's over our groundwater program with TCEQ is Jim Formby.

MR. MILLER: Okay.

MR. DUPLANT: And you can find his information on the web site, TCEQ's web site.

MR. MILLER: Okay.

THE REPORTER: Excuse me. What's your name?

MR. DUPLANT: Brett Duplant, I apologize, with Huntsman.

THE REPORTER: Brant Deplant?

MR. DUPLANT: Brett, B-R-E-T-T, Duplant, D-U-P-L-A-N-T.

THE REPORTER: Could you speak up? I'm sorry?

MR. DUPLANT: Duplant, D-U-P-L-A-N-T.

THE REPORTER: Thank you.

MR. DUPLANT: Brett.

MR. ALLISON: Can I ask -- I'm Jerry Allison again. I'd recommend on the Molasses Bayou -- I don't know how they let those boats get parked in there and they stopped the natural circulation of Molasses Bayou used to it. And also, the core of engineers, they pump spoilage. They got a, you know, a spoil levy, you know back on the east side. And that water coming out there, discharge water, had solids in it and it stopped the flow going to the river from there. That should be cleaned back up or dug back out where that would be a natural circulating bayou again like it --

It was that way for -- until about 15 years ago I'd say. I hope they do something about that.

MR. MILLER: Yeah. I'd like to get with you after the meeting on that.

MR. ALLISON: Yeah.

MR. MILLER: That's not really a part of the site, but I know some folks at the core. So I'll talk to them and see what I can find out --

MR. ALLISON: Yeah, it's their fault. They shouldn't never let that happen.

MR. MILLER: Okay. Yeah. Let's get together after the meeting.

MR. ALLISON: Okay. Thank you.

MR. LABURN: Scott Laburn, L-A-B-U-R-N.

THE REPORTER: L-A -- I'm sorry?

MR. LABURN: L-A-B-U-R-N. Where does all the contaminated material going to go and how and what happens to it?

MR. MILLER: It'll be -- there hasn't been a disposal facility picked. You know, it depends on the contaminants and that'll be determined during the remedial design; but there are requirements depending on the material, the levels and the material that's hauled off and it'll have to comply with all those laws.

But during the remedial design, they go through and they'll say, okay, we've got this much material and it contains this much contamination and they'll basically get bids and make sure those places can either put it in a landfill somewhere, a permanent landfill or do some other treatment, just whatever is needed but right now, we don't have those places identified yet.

MR. LABURN: So it could be another state? It could be anywhere?

MR. MILLER: It could be anywhere, yeah.

MR. LABURN: And you mentioned the whole concept of ecological but if you take off 12 inches, I mean, has anybody figured out how many animals that's going to kill that's in the mud?

MR. MILLER: Yeah. That was a big trade off because you'd say okay, well, we'll just -- we're not going to do anything. We're just going to leave it like it is. Well, yeah, you could do that and you wouldn't damage anything; but when you do that, you'd leave in the areas that have the higher levels of concentration, it's going to continue to be there and it's going to continue to hurt, you know, the ecology.

So basically, what we tried to do is a trade off. We said okay, there is half toxicity but maybe a little bit less. We'll just leave them and go. Because when we -- you're right. When we dig it up, I mean, we're destroying it. But we hope by taking those materials out a lot quicker, that the marsh and whatever can reestablish itself; but that --

I mean, that is the trade off that we make. In a lot of cases, we say well, you know, we're really better off just leaving it so -- and allowing for the natural processes to work over time which works slowly.

MR. ALLISON: The bugs then eat the stuff. That's what we did at Dupont.

MR. MILLER: Yeah, yeah. That's -- these natural processes, there are naturally incurring bugs, bacteria that break down some of the things. Some of the things, no.

MR. ALLISON: It decays, yeah.

MR. MILLER: Yeah so ... Did you have anything you to wanted add?

MR. SHEWMAKE: No. I'm the Risk Assessor, and I did a lot of the data analysis. And he did a great job of presenting the risk information. If y'all have any questions, I'll be around and can answer anything you want to know.

MR. MILLER: All right. Well, if there are no more questions, Bill, you want to close up?

MR. LITTLE: I just want to remind everyone that -- about the public comment period. If you do have a statement, a comment you want to make, we have to have it in writing. And if you need the address, I have plenty of the sheets in the back that have the address for Gary in the Dallas office. But we need it by -- it's got to be postmarked by July 20th and then it will go in the record and we will consider that in establishing the Record of Decision and the Feasibility Study and how we're going to get this done. So it's very important that we get it in writing.

MR. BOURG: So the questions we had tonight, we have to put it in writing?

MR. LITTLE: Yes, sir.

MR. MILLER: Well, let me. The questions

you asked tonight are in the record so the court reporter will have a report of everything. And when we do the response to comments, I'll go through those comments. And if you want to say anything in addition to that -- but what everybody brought up tonight, those comments or questions will be in the record and part of the Record of Decision.

MR. LITTLE: You want to make sure it's in there, send it to us in writing, okay. And he didn't say anything wrong; but if you want make sure, we need it in writing by July 20th. Okay?

And if you have questions, we're basically done. If want to stay around, ask anybody any questions, look at the maps. There's some more maps over there. Ken, Gary, everybody else will be here to answer your questions. Thank you very much for coming, and we hope you understand what we're trying to do. Thanks.

(Public meeting concluded at 6:53 p.m.)

STATE OF TEXAS)
COUNTY OF JEFFERSON)

REPORTER'S CERTIFICATION
PROPOSED PLAN PUBLIC MEETING for the
STAR LAKE CANAL SUPERFUND SITE
PORT NECHES, JEFFERSON COUNTY, TEXAS
JULY 11, 2013

I, Trevor Causey, Shorthand Reporter certify that the facts stated in the foregoing pages are true and correct.

I further certify that I am neither attorney or counsel for, related to, nor employed by any of the parties to the action in which this testimony was taken and, further, I am not a relative or employee of any counsel employed by the parties hereto, or financially interested in the action.

Trevor Causey

Trevor Causey
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